

# NHDOT SPR2 PROGRAM

## RESEARCH PROGRESS REPORT

<b>Project #</b> SPR 26962W		<b>Report Period:</b> Year 2021 <input type="checkbox"/> Q1 (Jan-Mar) <input checked="" type="checkbox"/> Q2 (Apr-Jun) <input type="checkbox"/> Q3 (Jul-Sep) <input type="checkbox"/> Q4 (Oct-Dec)	
<b>Project Title:</b> Log Jam Monitoring			
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<b>Project Start Date:</b> May 1, 2019	<b>Project End Date:</b> April 30, 2022	<b>Project schedule status:</b> <input type="checkbox"/> On schedule <input type="checkbox"/> Ahead of schedule <input checked="" type="checkbox"/> Behind schedule	

### Brief Project Description:

Extreme bank erosion along Route 16 in Errol is to be stabilized using an engineered log jam (ELJ). This is the first installation of an ELJ by NHDOT, and as such NHDOT is interested in the benefits of the structure pertaining to performance, habitat, and costs. The project shall be monitored for three years, including eight months of pre-construction monitoring and two years of post-construction monitoring. Monitoring activities are to cover hydraulic, structural, flora, and fauna; in addition, the monitoring provides inspection information to DOT to assess any need for maintenance or repairs. The ultimate objective of the project is to document all salient aspects of ELJs relative to road planning, permitting, construction, and maintenance, plus documenting stream system changes resulting from the ELJ.

### Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):

A TAG meeting was held May 5, 2021. No scope modifications were recommended. Two separate, two-day field campaigns were performed: April 24, 2021 for the bathymetry and June 7, 2021 to: survey the log jam (as built), read erosion pins at reference site, deploy underwater cameras, and download game camera across the river. Subsequent efforts synthesized this field data as well as updated the computer model.

### Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, etc.):

Construction progress reports and notification when the floating silt curtain will be removed.

### Anticipated research next three(3) months:

Continue synthesis of field data from the last quarter, continue model of post-construction model, and another field campaign like the June 7, 2021 event. The additional field campaign is planned for summer 2021 after the floating silt curtain is removed.

### Circumstances affecting project:

From the last TAG meeting, NHDOT is required to monitor the log jam for two years after construction. Because construction was delayed one year (completed in spring 2021) this means monitoring through summer 2022 which is beyond the present contract end date. This also meant that there was an additional year of pre-construction monitoring. Therefore, both the contract end date and the budget will be revisited in late fall 2021.

The fact that the floating silt curtain was still in place in front of the log jam meant that fish could not easily access the shoreline, and therefore the underwater cameras deployed in the June 7, 2021 event were not representative of just the log jam shoreline.

Tasks (from Work Plan)	Planned % Complete	Actual % Complete
Task 1 Kick off meetings and information gathering	100% complete	100% complete
Task 2 (in the sixth quarter, proceeding as planned)	90%	80%

### Barriers or constraints to implementing research results

Contract extension and budget revision will be necessary to meet the original project objectives.